

WHAT IS CLAIMED IS:

50  
A

1. An apparatus for sending a ringing signal to notify a called terminal of the presence of an incoming call addressed thereto, comprising:
- ringing voltage generating means for generating a ringing voltage;
- ringing signal sending means for sending out a ringing signal over a subscriber line by outputting the ringing voltage with a predetermined duty cycle of a ringing period and a silent period;
- data transfer means for performing a data transfer to the called terminal over the subscriber line during one of the silent periods;
- feed impedance setting means for providing a high-impedance feed voltage; and
- feed impedance selection means for selecting a low-impedance feed voltage in the one of the silent periods during which the data transfer is performed, and selecting the high-impedance feed voltage in the other silent periods during which no data transfer is performed.
2. The apparatus according to claim 1, further comprising path set-up means for establishing a path to the called terminal only when the data transfer is scheduled.

3. The apparatus according to claim 1,  
wherein said feed impedance setting means provides the  
high-impedance feed voltage by inserting a predetermined  
resistance in series with a power source in a subscriber  
5 line circuit (SLIC).

4. The apparatus according to claim 1,  
wherein:

10 said ringing voltage generating means comprises a  
ringing voltage source and a ringing signal bias voltage  
source; and

15 said feed impedance setting means comprises a  
resistor coupled to one of said ringing voltage source,  
said ringing signal bias voltage source, and said ringing  
voltage generating means itself.

5. The apparatus according to claim 1,  
wherein said feed impedance selection means selects the  
high-impedance feed voltage during a short interrupt  
20 period which is contained as part of the ringing period.

6. The apparatus according to claim 1,  
wherein said feed impedance selection means selects the  
high-impedance feed voltage for a predetermined period at  
25 the beginning and end of the one of the silent periods  
during which the data transfer is performed.

2b  
AI

7. An apparatus for sending a ringing signal to inform a caller of the presence of an incoming call addressed thereto, comprising:

ringing voltage generating means for generating a  
5 ringing voltage;

ringing signal sending means for sending out a ringing signal over a subscriber line by outputting the ringing voltage with a predetermined duty cycle of a ringing period and a silent period;

10 feed impedance setting means for providing a high-impedance feed voltage; and

feed impedance selection means for selecting the high-impedance feed voltage in the silent period to drive the subscriber line.

15

8. The apparatus according to claim 7, wherein said impedance selection means selects the high-impedance feed voltage during a short interrupt period which is contained as part of the ringing period.

20